#3 n.t. 5-0

PAGE: 1

46

RAW SEQUENCE LISTING PATENT APPLICATION US/09/480,977

DATE: 03/17/2000 TIME: 02:47:09

INPUT SET: S35068.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

```
1
                                       SEQUENCE LISTING
 2
            General Information:
 3
     (1)
 4
        (i) APPLICANT: Godowski, Paul J., Mark, Melanie Rose, Zhang, Dong Xiao
 5
 6
 7
       (ii) TITLE OF INVENTION: ErbB Receptor-Specific Neuregulin Related
 8
                                 Ligands and Uses Therefor
 9
10
      (iii) NUMBER OF SEQUENCES: 23
11
12
       (iv) CORRESPONDENCE ADDRESS:
                                                       ENTERED
            (A) ADDRESSEE: Genentech, Inc.
13
14
            (B) STREET: 1 DNA Way
            (C) CITY: South San Francisco
15
16
            (D) STATE: California
            (E) COUNTRY: USA
17
18
            (F) ZIP: 94080
19
20
        (v) COMPUTER READABLE FORM:
21
            (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
            (B) COMPUTER: IBM PC compatible
            (C) OPERATING SYSTEM: PC-DOS/MS-DOS
23
24
            (D) SOFTWARE: WinPatin (Genentech)
25
       (vi) CURRENT APPLICATION DATA:
26
27
            (A) APPLICATION NUMBER: 09/480,977
28
            (B) FILING DATE:
            (C) CLASSIFICATION:
29
30
       (vii) PRIOR APPLICATION DATA:
31
32
            (A) APPLICATION NUMBER: 08/899,437
33
            (B) FILING DATE: 24-Jul-1997
35
     (viii) ATTORNEY/AGENT INFORMATION:
36
            (A) NAME: Conley, Deirdre L.
37
            (B) REGISTRATION NUMBER: 36,487
38
            (C) REFERENCE/DOCKET NUMBER: P1084R1
39
40
       (ix) TELECOMMUNICATION INFORMATION:
41
            (A) TELEPHONE: 650/225-2066
42
            (B) TELEFAX: 650/952-9881
43
     (2) INFORMATION FOR SEQ ID NO:1:
44
45
        (i) SEQUENCE CHARACTERISTICS:
```

(A) LENGTH: 2538 base pairs

RAW SEQUENCE LISTING PATENT APPLICATION US/09/480,977

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INPUT SET: \$35068.raw

(B) TYPE: Nucleic Acid (C) STRANDEDNESS: Single (D) TOPOLOGY: Linear (ix) FEATURE: (A) NAME/KEY: mouse NRG3 nucleic acid (B) LOCATION: 1-2538 (C) IDENTIFICATION METHOD: (D) OTHER INFORMATION: (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1: CCTGACCGGC CGGCCGCCC CGGCCCGTC TCGCCCCTCT ACCGAGCGCC 50 TCGCCGCCCC CTCCCCGGCC CGCGTCCCT CCCCCGTCCT CTCCTCCCCG 100 CCCGCCGCCC GCCTCTCGGG GGGAGGGGCG TGGGGGCAGG GAGCCGATTT 150 GCATGCGGCC GCCGCGGCCG CTGCCTGAGC CGGAGCCCGC CGCCGCCGGA 200 GCCCGCGCCC GCGCCCGCG CCGCCCCATG CCTCTGCCGC 250 GGCCCTCGGG GGGGCGAAGG TGAAGATCGG CTCCTAGGAT GAGTGAAGGG 300 GCGGCCGGTG CCTCGCCACC TGGTGCCGCT TCGGCAGCCG CCGCCTCAGC 350 CGAGGAGGC ACCGCGGCGG CTGCGGCGGC GGCGGGGGGGCC 400 CGGACGGCGG CGGAGAAGGG GCGGCCGAAC CCCCCCGGGA GTTACGCTGT 450 AGCGACTGCA TCGTGTGGAA CCGGCAGCAG ACGTGGTTGT GCGTGGTGCC 500 TCTGTTCATC GGCTTCATCG GCCTGGGGCT CAGCCTCATG CTGCTTAAAT 550 GGATCGTGGT AGGCTCCGTC AAGGAGTACG TGCCCACGGA CCTGGTGGAC 600 TCCAAGGGAA TGGGCCAGGA CCCCTTCTTC CTCTCCAAGC CCAGCTCTTT 650 CCCCAAGGCT ATGGAAACCA CCACAACAAC CACTTCTACC ACGTCCCCCG 700 CCACCCCTC TGCCGGCGC GCCGCTTCTT CCAGGACGCC TAACCGGATT 750 AGCACCCGCT TGACCACCAT CACACGGGCA CCCACCCGCT TCCCTGGGCA 800 CCGGGTTCCC ATCCGGGCTA GCCCGCGCTC TACCACAGCA CGGAACACTG 850 CTGCCCCTCC GACGGTCCTG TCCACCACGG CCCCTTTCTT CAGTAGCAGC 900 ACGCCCGGCT CCCGACCCCC GATGCCAGGA GCCCCCAGTA CGCAGGCGAT 950 GCCTTCCTGG CCCACTGCGG CGTATGCTAC CTCCTCCTAC CTCCACGATT 1000

RAW SEQUENCE LISTING PATENT APPLICATION US/09/480,977

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					,	NORTH CHAR COSOZO
100	CCACTCCCTC	CTGGACCCTG	TCACCCTTTC	AGGATGCTGC		NPUT SET: S35068.raw
101					1000000101	1030
102	TCCTCCTCAC	CCTCTTCCAC	CTCCTCCACT	ACCACCACCC	CAGAAACTAG	3 1100
103						
104	CACCAGCCC	: AAATTTCATA	CTACAACATA	CTCCACTGAA	CGATCTGAGO	1150
105						
106	ACTTCAAACC	CTGTCGAGAC	AAGGACCTGG	CGTATTGTCT	CAATGATGGT	1200
107 108	ሮአ አጥሮርሙሙጥር	T TO A TOTAL A CA CA	CCTC > C > CC >	maaaa ma a a a		
109	GAAIGCIIIG	TGATTGAGAC	CCTGACAGGA	TCCCATAAGC	ACTGTCGGTG	; 1250
110	CAAGGAAGG	TACCAAGGAG	ጥሮሮርጥጥርጥርል	ጥሮ እ እጥጥጥሮጥሮ	CCCAAAACAC	1 1 3 0 0
111			1000110104	ICHMITTELG	CCGAAAACAG	1300
112	ACTCCATCTT	ATCGGATCCA	ACAGACCACT	TGGGGATTGA	ATTCATGGAG	: 1350
113						
114	AGTGAAGACG	TTTATCAAAG	GCAGGTGCTG	TCAATTTCAT	GTATCATCTT	1400
115						
116	TGGAATTGTC	ATCGTGGGCA	TGTTCTGTGC	AGCATTCTAC	TTCAAAAGCA	. 1450
117	303330330					
118 119	AGAAACAAGC	TAAACAAATT	CAGGAGCACC	TGAAAGAGTC	ACAGAATGGG	1500
120	ልል ርልልሮሞአርአ	GCCTCAAGGC	ATCCACCACA	3 3 CTCTCTC 3 C 3	CCMMC2 MC2 2	
121	ANGANC IACA	GCCTCAAGGC	ATCCAGCACA	AAGICIGAGA	GCTTGATGAA	. 1550
122	GAGCCATGTC	CATCTACAAA	АТТАТТСААА	GGCGGATAGG	СУДССТСТСТ	1600
123					CHICCIGIGA	1000
124	CTGCGCTGGA	GAAAATAATG	GAGTCAAGTT	TTTCAGCTCC	CCAGTCGTTC	1650
125				*		
126	CCAGAAGTCA	CTTCTCCTGA	CCGAGGAAGC	CAGCCTATCA	AGCACCACAG	1700
127	000100101					
128 129	CCCAGGACAA	AGGAGTGGGA	TGTTGCATAG	GAATACTTTC	AGAAGGGCAC	1750
130	CACCCTCACC	CCGAAGTCGA	CTCCCTTCCTTA	MMCM3 CC3 CC	200101000	
131	CACCCICACC	CCGAAGICGA	CIGGGIGGIA	TIGIAGGACC	AGCATATCAA	1800
132	CAACTTGAAG	AATCAAGAAT	TCCAGACCAG	GATACGATAC	СТТСССААСС	1850
133					CIIOCCARGO	
134	GATAGAGGTC	AGGAAGACTA	TATCCCACCT	GCCTATACAG	CTGTGGTGTG	1900 .
135						
136	TTGAAAGACC	CCTGGACTTA	AAGTATGTGT	CCAATGGCTT	AAGAACCCAA	1950
137	63.3.3.maga.m					
138 139	CAAAATGCAT	CAATAAATAT	GCAACTGCCT	TCAAGAGAGA	CAAACCCCTA	2000
140	ጥጥጥል ልጥል ርር	TTGGATCAAA	ACC ACCTCCT	CCCTTT A TITLE A	magaan naga	2252
141	IIIIMIAGC	IIGGAICAAA	AGGACCIGGI	GGGIIAIIIA	TCCCCAAGGG	2050
142	CCAATTCTGT	GCCCATCATC	CCGTCGATGG	СТСТАСААСА	ልልሮሮፕሮሮልፕሮ	2100
143				0101110111011	. Electocato	2100
144	CAAATGCCAG	GGATTTCTGA	CGTCAAAAGC	ATTAAATGGT	GCAAAAACTC	2150
145						
146	CTACTCCGCT	GACATTGTCA	ACGCGAGTAT	GCCAGTCAGT	GATTGTCTTC	2200
147	ma	3.03.00				
148 149	TAGAAGAACA	ACAGGAAGTG	AAAATATTAC	TAGAGACTGT	GCAGGAACAG	2250
150	ል ጥሮሮር ር አ ጥጥሮ	TGACTGATGC	CACACCCCCA	CA ACA COMOC	3 3 CMCCCC -	0300
151	ALCOGNIT	IGACIGATGC	CAGACGGTCA	GAAGACTTCG	AACTGGCCAG	2300
152	CATGGAAACT	GAGGACAGTG	CGAGCGAAAA	CACAGCCTTTTT	ርጥርርርርርጥርን	2350
					CICCCCIGA	2330

RAW SEQUENCE LISTING PATENT APPLICATION US/09/480,977

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153	INPUT SET: S35068.raw											
153 154	GTCCCACGGC CAAATCAGAA CGAGAGGCAC AATTTGTCTT AAGAAATGAA 2400											
155 156	ATACAAAGAG ACTCTGTGCT AACCAAGTGA CTGGAAATGT AGGAATCTGT 2450											
157 158	GCATTATATG CTTTGCTAAA CAGGAAGGAG AGGAAATTAA ATACAAATTA 2500											
159 160	TTTATATGCA TTAATTTAAG AGCATCTACT TAGAAGCC 2538											
161 162	(2) INFORMATION FOR SEQ ID NO:2:											
163												
164 165	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 713 amino acids											
166 167	(B) TYPE: Amino Acid (D) TOPOLOGY: Linear											
168 169	(ix) FEATURE:											
170	(A) NAME/KEY: Mouse NRG3 (mNRG3)/amino acid seq.											
171 172	(B) LOCATION: 1-713 (C) IDENTIFICATION METHOD:											
173 174	(D) OTHER INFORMATION:											
175	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:											
176 177	Met Ser Glu Gly Ala Ala Gly Ala Ser Pro Pro Gly Ala Ala Ser											
178 179	1 5 10 15											
180	Ala Ala Ala Ala Ser Ala Glu Glu Gly Thr Ala Ala Ala Ala											
181 182	20 25 30											
183	Ala Ala Ala Gly Gly Gly Pro Asp Gly Gly Gly Glu Gly Ala											
184 185	35 40 45											
186 187	Ala Glu Pro Pro Arg Glu Leu Arg Cys Ser Asp Cys Ile Val Trp 50 55 60											
188	,											
189 190	Asn Arg Gln Gln Thr Trp Leu Cys Val Val Pro Leu Phe Ile Gly 65 70 75											
191 192	Phe Ile Gly Leu Gly Leu Ser Leu Met Leu Leu Lys Trp Ile Val											
193	80 85 90											
194 195	Val Gly Ser Val Lys Glu Tyr Val Pro Thr Asp Leu Val Asp Ser											
196 197	95 100 105											
198	Lys Gly Met Gly Gln Asp Pro Phe Phe Leu Ser Lys Pro Ser Ser											
199 200	110 115 120											
201 202	Phe Pro Lys Ala Met Glu Thr Thr Thr Thr Thr Thr Ser Thr Thr											
203	125 130 135											
204 205	Ser Pro Ala Thr Pro Ser Ala Gly Gly Ala Ala Ser Ser Arg Thr 140 145 150											

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207 208	Pro	ASI	Arg	тте		rnr	Arg	Leu	Thr			Thr	Arg	Ala	
209					155					160					165
210	Thr	λνα	Dhe	Dro	C111	uia	7~~	17-1	Dwo	T1.	7	71.		D	
211	1111	Arg	FIIC	PIO	170	UTS	Arg	Val	PIO			Ala	ser	Pro	_
212					170					175					180
213	Ser	Thr	Thr	λla	λνα) cn	Thr	71-	71-	Dwo	Dwa	mb	170]	T	0
214	261	1111	1111	міа	185	ASII	1111	Ald	Ата	190		THE	vai	Leu	
215					103					190	,				195
216	Thr	Thr	Δla	Pro	Dha	Dho	Cor	Car	Car	Thr	Pro	C1.,	Com	Arg	D
217		1111	niu	110	200	FIIC	per	per	per	205	PIO	GIY	ser	Arg	
218					200					205					210
219	Pro	Met	Pro	Glv	Δla	Pro	Sar	Thr	Cln.	λla	Mot	Dro	202	Trp	Dro
220				0-1	215	110	Der	1111	GIII	220	Mec	FIO	Ser	пр	225
221					213					220					225
222	Thr	Δla	Ala	Tvr	Δla	Thr	Ser	Ser	Tivr	T.011	Wie) en	Cor	Thr	Bro
223				-1-	230	****	JCI	DCI	171	235	1113	тэр	per	1111	240
224										2,5					240
225	Ser	Trp	Thr	Leu	Ser	Pro	Phe	Gln	Asp	Δla	Δla	Δla	Δla	Ser	Ser
226		1			245				р	250		****	2114	JCI	255
227															2,5
228	Ser	Ser	Pro	Ser	Ser	Thr	Ser	Ser	Thr	Thr	Thr	Thr	Pro	Glu	Thr
229					260					265				0_u	270
230															2,0
231	Ser	Thr	Ser	Pro	Lys	Phe	His	Thr	Thr	Thr	Tvr	Ser	Thr	Glu	Ara
232					275					280	•				285
233															
234	Ser	Glu	His	Phe	Lys	Pro	Cys	Arg	Asp	Lys	Asp	Leu	Ala	Tyr	Cys
235	-				290				_	295	_			_	300
236															
237	Leu	Asn	Asp	Gly	Glu	Cys	Phe	Val	Ile	Glu	Thr	Leu	Thr	Gly	Ser
238					305					310					315
239															
240	His	Lys	His	Cys		Cys	Lys	Glu	Gly	Tyr	Gln	Gly	Val	Arg	Cys
241					320					325					330
242	_														
243	Asp	Gln	Phe	Leu		Lys	Thr	Asp	Ser	Ile	Leu	Ser	Asp	Pro	Thr
244					335					340					345
245	_	•	_						_		_				
246	Asp	His	Leu	GLY		Glu	Phe	Met	Glu		Glu	Asp	Val	Tyr	
247					350					355					360
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249	Arg	GIN	vaı	ьeu		тте	ser	Cys	Пе		Phe	Gly	Ile	Val	
250					365					370					375
25															

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/480,977

DATE: 03/17/2000 TIME: 02:47:11

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Line

Error

Original Text

SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/09/480,977

DATE: 03/17/2000 TIME: 02:47:11

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<< THERE ARE NO ITEMS MISSING >>

SEQUENCE CORRECTION REPORT PATENT APPLICATION US/09/480,977

DATE: 03/17/2000 TIME: 02:47:11

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Original Text

Corrected Text